

## **ABSTRACT**

An image rejection mixer includes an in-phase mixer for mixing a received RF signal with an in-phase reference signal to produce a current mode in-phase mixed signal and a quadrature-phase mixer for mixing the received RF signal with a quadrature-phase reference signal to produce a current mode quadrature-phase mixed signal, the quadrature-phase reference signal and the in-phase reference signal having a substantially orthogonal phase difference. A polyphase filter network is coupled to the current mode outputs of the in-phase mixed signal and the current mode quadrature-phase mixed signal. An inductor is coupled between an output of the polyphase filter network and a supply voltage to convert an output of the image rejection mixer to a voltage mode signal.